Remarks

Applicants have carefully reviewed the Office Action mailed on February 22, 2011. Applicants respectfully traverse (and do not concede) all objections, rejections, adverse statements, and adverse assertions made by the Examiner. Claims 1, 3, 4, 6-10, 12-15, 23 and 26-29 are pending in the application, with claim 15 being withdrawn from consideration and claims 1, 3, 4, 6-10, 12-14, 23 and 26-29 being rejected. Claims 1, 3, 4, 6-10, 12-14, 23 and 26-29 are presented for examination.

Claim Rejections Under 35 U.S.C. §103

Claim 23 is rejected under 35 U.S.C. §103(a) as being unpatentable over Belef et al. in U.S. Patent No. 7,169,165 in view of Perkins et al. in U.S. Patent No. 6,398,775.

Independent claim 23 recites:

> 23. (previously presented) A filter delivery catheter, comprising:
> an elongated shaft defining a shaft lumen, the shaft having a proximal end and a distal end;
> the elongated shaft including a plurality of aspiration ports;
> the plurality of aspiration ports located circumferentially on the elongated shaft at one or more longitudinal positions proximal of the distal end;
> a blood permeable filtration device for trapping debris within the lumen of a blood vessel, the filtration device having a proximally-facing mouth, an expanded configuration, and a collapsed configuration, the filtration device in its collapsed configuration being sized to fit within the shaft lumen; and
> a guidewire slidably disposed within the shaft lumen;
> wherein all of the aspiration ports are located proximally of the filtration device when the filtration device is entirely contained within the shaft lumen;
> wherein the guidewire passes through the proximal most aspiration port.

FIGS. 1B and 3A of Belef appear to disclose a device having an expandable filter device (50) mounted on a distal end (26) of a support wire (25). Said device appears to be disposed inside the lumen of a tubular member (10), with a guidewire (20) passing through an opening (16) in the side of the tubular member (10).

Belef does not disclose any aspiration ports, and therefore cannot disclose the limitations of "the elongated shaft including a plurality of aspiration ports", "the plurality of aspiration ports located circumferentially on the elongated shaft at one or more longitudinal positions proximal of the distal end", "wherein all of the aspiration ports are located proximally of the filtration device when the filtration device is entirely contained

within the shaft lumen" and "wherein the guidewire passes through the proximal most aspiration port", as recited by independent claim 23.

Furthermore, the Office Action notes that "Belef does discuss connecting the proximal end of the shaft to a suction source to aspirate embolic material at the distal end of the shaft in other embodiments. (See at least Col. 8, Ln 39-40)" In other words, Belef provides a method for aspiration. As such, there is no motivation in Belef to add any aspiration ports, since aspiration is already accomplished through the proximal end of the shaft. Therefore, Belef, taken alone, does not render claim 23 obvious.

FIG. 6 of Perkins appears to disclose an inner catheter (100) having aspiration ports (106) that are located proximal to an inflatable isolation cuff (104). The aspiration ports (106) are arranged longitudinally along a side of the catheter body (102), and are all connected to a single lumen (108), shown in FIG. 6A of Perkins.

As such, Perkins does not teach or suggest arranging the aspiration ports (106) "circumferentially on the elongated shaft at one or more longitudinal positions proximal of the distal end", as recited by claim 23. In fact, to arrange the ports (106) of Perkins in such a manner would mean that at least some of the ports (106) would no longer connect to the single lumen (108) that is used for aspiration. In other words, modifying the device of Perkins so that the aspiration ports (106) are arranged as recited in claim 23 would render the device of Perkins inoperative. Perkins, therefore, cannot be used to form an obviousness rejection of claim 23.

For at least the reasons set forth above, Applicants respectfully submit that claim 23 is patentable over the combination of Belef and Perkins, to the extent that such a combination is even possible.

Claims 1, 3, 4, 6-10, 12-14, 21, 22 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Belef et al. in U.S. Patent No. 7,169,165 in view of Perkins et al. in U.S. Patent No. 6,398,775 and further in view of Tao in U.S. Patent No. 6,610,005.

Regarding claims 1, 3, 4, 6-10, 12-14 and 26, independent claim 1 recites:

> 1. (previously presented) A filter delivery catheter, comprising:
> an elongated shaft defining a shaft lumen, the shaft having a proximal end and a distal end;
> the elongated shaft including a plurality of aspiration ports;
> the plurality of aspiration ports located circumferentially on the elongated shaft at one or more longitudinal positions proximal of the distal end; and

a blood permeable filtration device for trapping debris within the lumen of a blood vessel, the filtration device having a proximally-facing mouth, an expanded configuration, and a collapsed configuration, the filtration device in its collapsed configuration being sized to fit within the shaft lumen;

wherein all of aspiration ports are located proximally of the filtration device when the filtration device is entirely contained within the shaft lumen;

wherein the distal end of the elongated shaft further comprises an operable end cap fixedly attached thereto.

As noted above, because Belef fails to disclose aspiration ports of any type, and because Perkins discloses a device that would be inoperative if its aspiration ports were arranged circumferentially, Applicants assert that the combination of Belef and Perkins does not teach or suggest the limitation of "the plurality of aspiration ports located circumferentially on the elongated shaft at one or more longitudinal positions proximal of the distal end", as recited by claim 1. Therefore, the combination of Belef and Perkins does not render claim 1 obvious.

Tao is relied on in the Office Action for teaching "a number of end cap embodiments that are fixedly attached to the distal end of a catheter 24 for preventing debris from entering the catheter while it is advanced through a body lumen. (Figures 4-10 and 20-22)" As such, Tao is silent regarding the location of aspiration ports, and cannot remedy the deficiencies of Belef and Perkins in forming an obviousness rejection of claim 1.

For at least the reasons set forth above, Applicants respectfully submit that claim 1 is patentable over the combination of Belef, Perkinds and Tao, to the extent that such a combination is even possible. Because claims 3, 4, 6-10, 12-14 and 26 depend from claim 1, they are also patentable for the same reasons as claim 1 and because they add significant elements to distinguish them further from the art.

Applicants note that claims 21 and 22 were canceled in a previous Office Action response, rendering the rejection moot.

Claims 27-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over Belef et al. in U.S. Patent No. 7,169,165 in view of Perkins et al. in U.S. Patent No. 6,398,775, further in view of Tao in U.S. Patent No. 6,610,005, and even further in view of Hoy in U.S. Patent No. 6,705,575.

Regarding claims 27-29, said claims all depend from independent claim 1. As noted above, because Belef fails to disclose aspiration ports of any type, because Perkins discloses a device that would be inoperative if its aspiration ports were arranged circumferentially, and because Tao is silent regarding the location of aspiration ports, Applicants assert that the combination of Belef, Perkins and Tao does not teach or suggest the limitation of "the plurality of aspiration ports located circumferentially on the elongated shaft at one or more longitudinal positions proximal of the distal end", as recited by claim 1. Therefore, the combination of Belef, Perkins and Tao does not render claim 1 obvious.

Hoy is relied on in the Office Action for teaching "a device having a related cap-like means 40 comprising a plurality of overlapping plates 44 (Figures 1 and 5A-5C)." As such, Hoy cannot remedy the deficiencies of Belef, Perkins and Tao in forming an obviousness rejection of claim 1.

For at least the reasons set forth above, Applicants respectfully submit that claim 1 is patentable over the combination of Belef, Perkins, Tao and Hoy, to the extent that such a combination is even possible. Because claims 27-29 depend from claim 1, they are also patentable for the same reasons as claim 1 and because they add significant elements to distinguish them further from the art.

Withdrawal of the obviousness rejections is respectfully requested.

Conclusion

In view of the foregoing, all pending claims are believed to be in condition for allowance. Further examination, reconsideration, and withdrawal of the rejections are respectfully requested. Issuance of a Notice of Allowance in due course is anticipated. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Date: May 16, 2011

Respectfully submitted,

Glenn M. Seager, Reg. No. 36,926
SEAGER, TUFTE & WICKHEM, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, Minnesota 55403-2420
Glenn.Seager@stwiplaw.com
Tel: (612) 677-9050
Fax: (612)359-9349